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Gerald M. Benson

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EXAMINER

CHEVALIER, ALICIA ANN

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/515,978
Filing Date: February 25, 2000
Appellant(s): BENSON ET AL.

Sandra K. Nowak
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 22, 2009 appealing from the Office action mailed March 16, 2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

U.S. Patent Application No. 11/061,327 is a division of the present patent application and is on appeal (no appeal number assigned at this time).

The present application was previously appealed in Appeal No. 2007-2987. The Board's decision in this Appeal was rendered on November 30, 2007.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

Art Unit: 1794

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,657,162

NILSEN et al.

08-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 16-23 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Nilson et al. (U.S. Patent No. 5,657,162).

Nilson discloses a compound substrate comprising a replicated substrate having a structured surface (*microprisms, col. 2, lines 43-44, figure 2, ref. #26*), a machined substrate (*metallic deposits, col. 2, lines 48-49*) piece and/or discrete pieces embedded in a portion of the structured surface of the replicated substrate (*figure 2*) and at least one cube corner element that has at least one constituent face disposed on the replicated substrate and a least another constituent face disposed on the machined substrate piece (*figure 2*). Each of the first and machined substrate have an exposed surface that defines a face of a cube corner element on the compound substrate (*figure 2*).

Art Unit: 1794

The cube corner element has a cube height of no greater than about 1 mm (*col. 2, lines 64-67*) and the at least one constituent face and the at least another constituent face are disposed on opposite sides of a transition line that is nonparallel to a dihedral edge of the cube corner element (*figure 2*). The at least one constituent face and the at least another constituent face are disposed on opposite sides of transition line, wherein substantially all transition lines are parallel to a reference plane (*figure 2*). The cube corner element is deemed to have an outline in plan view selected from the group of shapes consisting of a hexagon and a quadrilateral. The structured surface of the replicated substrate includes cavities and discrete pieces of the machined substrate comprising a plurality of pyramids that are adjacent to the cavities and form cub corner elements (*figure 2*).

(10) Response to Argument

Appellant's arguments in the Appeal Brief Filed September 22, 2009 regarding the 35 U.S.C. 102(b) rejection over Nilsen of record have been carefully considered but are deemed unpersuasive.

Appellant argues that the meaning and scope of the word "embedded" or "embed" as used in the pending independent claim means "to fix firmly in a surrounding mass." Appellant further argues that Nilsen neither describes nor shows discrete pieces that are fixed firmly in a surround mass.

As states in the final office action, Appellant's machined substrate portion is embedded, "fix firmly in a surrounding mass," in the same sense that Nilsen's coating is fixed firmly in a surrounding mass on the surface of the microprism formations. As disclosed in Appellant's

Art Unit: 1794

specification on page 11, lines 5-20, that the replicated substrate and machined substrate are only bonded together with creates an interface. There is no description in the specification that the machined substrate is ever more than surface bonded to the replicated substrate. The specification further disclose on page 12, line 26 through page 13, line 20 that the machined substrate is cut and some portions remained attached, while other portions are removed. Therefore, the machined portions are firmly surfaced bonded to the replicated substrate surface and surround by replicated substrate protrusions. Which is the same structure Nilsen shows, e.g. a coating substrate selectively bonded to the microprism substrate and the coating substrate surrounded by microprism substrate protrusions.

(11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided by Appellant in the Related Proceedings Appendix in the instant Appeal Brief filed September 22, 2009.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Alicia Chevalier/
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/David R. Sample/
Supervisory Patent Examiner, Art Unit 1794

/Benjamin L. Utech/

Application/Control Number: 09/515,978

Page 6

Art Unit: 1794

Primary Examiner